

SYSTEM AND METHOD FOR CLUSTER MANAGEMENT  
BASED ON HPC ARCHITECTURE

ABSTRACT OF THE DISCLOSURE

Cluster management software comprises a plurality of cluster agents, with each cluster agent associated with an HPC node including an integrated fabric and the  
5 cluster agent operable to determine a status of the associated HPC node. The software further includes a cluster management engine communicably coupled with the plurality of the HPC nodes and operable to execute an HPC  
10 job using a dynamically allocated subset of the plurality of HPC nodes based on the determined status of the plurality of HPC nodes.